REMARKS

Drawings

Figure 3 has been objected to as comprising only prior art. Applicants have therefore added the legend "Prior Art" to Figure 3 and have labelled the drawing sheets as a "Replacement Sheet" in accordance with the Examiner's suggestion.

Claim rejections – 35 USC § 112

The examiner has rejected claims 6-9 on the basis that they are indefinite in that:

- (i) Claims 6 and 9 incorrectly state "second" when they should state "first" in connection with the second and first pluralities of wavebands; and
- (ii) Claims 6 and 9 incorrectly refer to "the second plurality of wavelengths" when they should refer to "each wavelength component of each waveband".

These claims have therefore been amended in the manner suggested by the Examiner in the above listing of amended claims.

Claim rejections – 35 USC § 102

The Examiner has rejected claims 1-4 and 10 on the basis that they are anticipated by the Stephens et al prior art, namely US 6,563,614 B1. Reconsideration is requested.

Applicants appreciate that the disclosure in Stephens has the appearance of anticipating the claims listed by the Examiner but, with the greatest respect, applicants believe that there is a fundamental difference. The specification of the present application makes it clear at the outset that *average* power monitoring is a known technique in the prior art – see for example page 2, lines 16-32 and page 3, lines 1-8. The present invention departs from the prior art technique by monitoring *transients* instead. The advantages of this are spelled out in the first two pages of the specification, including the ability to monitor drop in/out nodes where additional connections are made. Average power monitoring cannot deal with such nodes in the same way as the present invention.

The examiner acknowledges in page 4 of the Office Action that "Stephens et al do not use the word 'transients' in describing the system they disclose". The Examiner's conclusion that, since the detectors in Stephens monitor power variations they

automatically monitor power transients, is not a valid deduction, it is respectfully submitted. Power monitors with a long time constant are inherently incapable of detecting transients since they are taking an average. This is the very reason why the present specification discusses the disadvantages of prior art averaging monitors.

However, the Examiner has indicated that Claims 5 and 11 would be acceptable if presented in independent form, claims 6-9 then being allowable once re-written to overcome the rejection under 35 USC § 112. Applicants presume that Claim 10 would also be allowable as dependent from Claim 5, once itself re-written in independent form.

Therefore, despite reservations that Stephens actually anticipates claim 1, applicants hereby submit amended claims carrying the restriction previously spelled out in Claims 5, 6 and 9 relating to the contribution from each of the wavebands in the second plurality of wavebands and the derivation and solution of simultaneous equations. The amended independent claims now all share these features and, as the Examiner rightly points out under the heading "Allowable Subject Matter", the new claims relate to subject matter that is neither disclosed nor fairly suggested in Stephens nor indeed any of the other prior art, such as Kang et al (US 6,347,169 B1) and Seydnejad et al (US 2002/0114029 A1).

Given the above, it is submitted that the application is now in condition for allowance, and such further and favorable reconsideration is therefore urged.

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Respectfully submitted,

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